

### AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for fabricating a hollow diamond shell with geometrical shape, comprising:

preparing a matrix with a geometrical shape;

pretreating the matrix by using diamond powder agents in an ultra-sonic bath to incite nucleation of diamond on the matrix while blocking a zone on the surface of the matrix from the diamond powder agents;

synthesizing a diamond film on the matrix by CVD process to form a diamond/matrix composite, said composite being partially uncoated with the diamond film to have an opening site corresponding to the zone; and

etching the matrix of ~~partially covered~~ the composite partially uncoated with the diamond film through the opening site to obtain a hollow diamond shell.

2. (Currently Amended) The method of claim 1, wherein the size of the matrix is in the range between 200 nm and 2 mm in ~~length-longest~~ the longest length.

3. (Original) The method of claim 1, further comprising the step of applying vibrations to a plate on which the matrix is placed, to let the matrix move and rotate.

4. (Currently Amended) The method of claim 1, wherein the matrix is ~~pretreated by using diamond powders agents in an ultra-sonic bath to incite nucleation of diamond on the matrix~~ has a spherical shape.

5. (Currently Amended) The method of claim-4, 1, wherein an opening on the matrix is formed by attaching glue tapes during the pretreatment.

6. (Currently Amended) The method of claim 1, wherein the diamond film formed on the matrix has a (100) prevailing surface or nanocrystalline morphology ~~usable~~.

7. (Original) A hollow diamond shell with a geometrical figure fabricated by the method of claim 1.

8. (Currently Amended) A method for fabricating ~~a diamond with geometrical shape~~ diamond particles, comprising:

preparing a matrix with a geometrical shape;

synthesizing diamond particles on the matrix by CVD process to form a diamond/matrix composite and then stopping the diamond deposition before film formation; and

etching the matrix to obtain the diamond particles.

9. (Currently Amended) The method of claim 8, wherein each ~~the~~ size of the diamond particles is in the range between 10 nm and 100  $\mu\text{m}$ .